

In the Claims

I claim as my invention:

1. A system for providing communications between communication devices located on different landmasses, comprising:

first and second cables, wherein each of said first and second cables further comprises one or more data signal carrying lines and an electrical power conductor, wherein said first cable carries data signals between communication devices of a first landmass and a second landmass, and said second cable carries data signals between communication devices of the first landmass and a third landmass; and

an electrical power connector connecting said electrical power conductors of said first and second cables so that electrical current can flow between said power conductors of said first and second cables.

2. The system of claim 1, further comprising:

a first piece of power feed equipment having positive and negative terminals, located on the second landmass, wherein said positive terminal of said first piece of power feed equipment is electrically connected to said electrical power conductor of said first cable; and

a second piece of power feed equipment having positive and negative terminals, located on the third landmass, wherein said negative terminal of said second piece of power feed equipment is electrically connected to said electrical power conductor of said second cable.

3. The system of claim 2, wherein said negative terminal of said first piece of power feed equipment and said positive terminal of said second piece of power feed equipment are electrically connected to a ground potential.

4. The system of claim 1, wherein said first and second cables carry optical signals, and each includes one or more optical repeaters.

5. The system of claim 1, wherein an end of said first cable, and an end of said second cable, enter onto a first landmass at a common landing point.

6. The system of claim 5, wherein said ends of said first and second cables are routed to a cable station, and said electrical power connector is located in said cable station.

7. The system of claim 6, further comprising a first plurality of data signal carrying lines, communicatively coupled to said one or more data signal carrying lines of said first cable, and further communicatively coupled to a communication device of a first communication network located on the first landmass.

8. The system of claim 7, wherein said first plurality of data signal carrying lines carries electrical data signals, said one or more data signal carrying lines of said first cable carries optical data signals, and said first plurality of data signal carrying lines and

said one or more data signal carrying lines of said first cable are communicatively coupled using a converter for converting between optical and electrical signals.

9. The system of claim 1, wherein said signal carrying lines of said first cable are communicatively isolated from said signal carrying lines of said second cable.

10. The system of claim 1, wherein said signal carrying lines of said first cable carry different signals from signals carried on said signal carrying lines of said second cable.

11. A communication system, comprising:

a first cable station located on a first landmass, having a first piece of power feed equipment;

a second cable station located on a second landmass, having a second piece of power feed equipment;

a plurality of cable segments, each connecting communication networks of two landmasses, wherein each of said plurality of cable segments includes an electrical power conductor and one or more data signal carrying lines, and wherein said electrical power conductors of said plurality of cable segments are electrically connected in series between a positive terminal of said first piece of power equipment and a negative terminal of said second piece of power feed equipment.

12. The system of claim 11, wherein one of said plurality of cable segments includes a device powered by an electrical current carried on said electrical power conductor of said one of said plurality of cable segments.

13. The system of claim 12, wherein said device is an optical repeater, and one of said data signal carrying lines within said one of said plurality of cable segments is an optical fiber.

14. The system of claim 11, wherein the data signal carrying lines of one of said plurality of cable segments includes a plurality of continuous optical fibers.

15. The system of claim 11, wherein said data signal carrying lines of said plurality of cable segments are not connected in series between said first and second cable stations.

16. A method for modifying an existing communication system, wherein the existing communication system includes a first underwater cable carrying signals away from a first landmass, wherein the first underwater cable includes an electrical power conductor connected to a piece of power feed equipment on the first landmass for providing electrical power to one or more devices connected to the first underwater cable, comprising the steps of:

disconnecting a first end of the electrical power conductor of the first underwater cable from the piece of power feed equipment on the first landmass; and

~~connecting the first end of the electrical power conductor of the first underwater cable to an electrical power conductor of a second underwater cable, wherein the second underwater cable carries signals away from the first landmass.~~

17. The method of claim 16, further comprising the step of modifying a third piece of electrical power feed equipment that is electrically connected to the electrical power conductor of the first underwater cable, wherein said step of modifying allows the second and third pieces of power feed equipment to provide electrical power to one or more devices connected along lengths of the first or second cables.

18. The method of claim 16, further comprising the step of relocating the piece of power feed equipment on the first landmass from the first landmass to the third landmass.

19. The method of claim 16, further comprising the step of maintaining isolation ~~between data signal carrying portions of the first and second cables.~~

Add D' >